

## INSTRUCTIONS

### **Pre-departure Risk Assessment Check List**

This tool has been developed to allow pilots and technicians to evaluate the actual risk of the flight or maintenance. The tool is based on the PAVE (Pilot, Aircraft, enVironment, External pressure) check list and adapted for the final purpose is to make pilots and technicians aware that little simple situations, when put together or maintenance itself is not suggested unless some of the risky situations are mitigated.

Certain type of flights do not allow for a "just before flight" risk assessment (i.e. HEMS flights) and it is Nevertheless these kind of situations allow for a "pre-day" or "pre-shift" risk assessment, evaluating the scenarios. For example, after checking the daily weather, pilot can rate a HEMS primary flight over the the day. Every flight "easier" than that (secondary flight along a valley) will eventually reveal a lesser risk winch operations, and so on.

Technicians can score a possible line maintenance in the worst part of the day (or forecast weather) for

**The tool is released and intended as a basic reference: the questions and the scoring must be opposite type of operations that will be executed.**

Dedicated procedures must be issued when scoring is within "CAUTION" or "HIGH RISK" areas (i.e. "See

### **Tool usage**

The pilot or the technician must go through all the questions of the related type of operation (tabs on column D (Initial Score). A "X" will be automatically added and the adjacent cell will reflect the proportion the cell will turn red. These questions must be reviewed and a valid mitigation solution must be found. At the end of the checklist the sum of the scores and a "SAFE", "CAUTION" or "HIGH RISK" advice is re

After scoring the initial pre-flight situation, valid mitigating actions must be identified and applied for column "F" and a new scoring must be done on column "G". The related final score and position on the When a cell is selected in column "D" (Initial Score) the related "X" is inserted both in column "D" and without scoring all the other questions.

To erase all the scoring press the button "RESET SCORES" on the right side of the checklist.

To add a new question to the checklist just left click on a cell and press the button "INSERT QUESTION

To delete a question from the checklist just left click in a cell inside the question to be deleted and the

To insert a single empty line before a question (separation line for titles) just select a question and press question.

To delete a single line just select the line and press the button "DELETE SINGLE LINE"

### **WARNING**

**This tool is not foolproof.** The tool has been designed to allow people to change the checklist as much deleting questions or lines it is possible to irreparably change the checklist configuration. These are so  
- Always keep an untouched copy of this file to restart with if something goes wrong.

- Always keep an untouched copy of this file to restart with if something goes wrong.
- When designing a customized checklist keep saving copies of the file with different names during you undo the action.
- Do not insert or delete questions or single lines manually. Some controls could be erased and the air
- Do not erase or change rows 1 to 3 and column "A". They are used for the "Insert" and "Delete" macros
- Do not change or delete columns "M" to "Y". They are used for the graph construction and control.

**Software security.** This tool makes use of some macros and visual basic code (VBA). In order to be able to use the tool, when the Security Warning select "Enable Content").

## **CREDITS**

This tool has been developed by the EHSIT (European Helicopter Safety Implementation Team) - Specialist Operators, pilots, technicians are free to use and change the present tool for their needs. This tool, part of it or modifications of it can be distributed provided it is not used for commercial purposes.

Comments suggestions or request of information are welcomed.

**Capt. Stefano BURIGANA**

ie flight or of the maintenance.

l adapted for the type of flight (HEMS, leisure, training, passenger, etc.).

put together, will rise the total risk significantly, eventually in a so dangerous situation that the flight

s) and it is not feasible for a pilot to fill up a checklist when he/she needs to take off in 2/3 minutes.

valuating the worst possible scenario with realistic elements, or evaluating several different possible

nt over the highest mountain in the area, with the forecast wind and clouds on top, in the last part of

il a lesser risk. Or the pilot can rate separately possible primary mountain flights, secondary flights,

weather) for a technical problem during or after engine start.

**: be opportunely reviewed and adapted by the operator, school or single pilot to reflect the actual**

as (i.e. "Seek for Operation Post Holder approval" or "Cancel the flight").

n (tabs on the bottom of the document). To select the proper answer just left-click on the related cell  
ct the proper value. When the worst answer is selected, the adjacent cell will insert the value "2" and  
t be found before the flight.

evice is reported. The score is also visually depicted on a chart.

pplyed for at least those questions scored with a "2". Proper mitigation action must be written on  
ition on the graph are automatically updated.

in "D" and "G" (Final Score). In this way people can change only mitigated questions in column "G",

QUESTION". Three new lines, with related controls, will be inserted before the selected cell.

ed and then press the button "DELETE QUESTION". The related three lines will be deleted.

on and press the button "INSERT SINGLE LINE". A new line will be added before the selected

st as much as they like. For this reason there are few protections in the excel sheets; in adding or  
ese are some advices:

s during your work. When using the macros (buttons) there is no way to

and the automated parts of the sheet could not work properly.

Delete" macros.

id control.

r to be able to use these controls you need to enable them when opening the file (in the excel macro

am) - Specialist Team in Ops and SMS.

ercial purposes.



